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4] SOFTWARE SYSTEM AND METHODS FOR GENERATING A LOAD TEST USING A SERVER ACCESS LOG

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395/180, 183.09, 184.01, 500; 364/264.3-264.5

[56] References Cited

U.S. PATENT DOCUMENTS

5,295,261	3/1994	Simonetti .
5,303,166	4/1994	Amalfitano et al 702/186
5,388,255	2/1995	Pytlik et al
5,446,874	8/1995	Waclawsky et al 395/180
5,515,488	5/1996	Hoppe et al
5,524,202	6/1996	Yokohama .
5,544,310	8/1996	Forman et al
5,546,529	8/1996	Bowers et al
5,590,250	12/1996	Lamping et al
5,657,438	8/1997	Wygodny et al
5,787,254	7/1998	Maddalozzo, Jr. et al 395/200.28
5,812,780	9/1998	Chen et al 395/200.54
5,819,068	10/1998	Bromberg et al 395/500

OTHER PUBLICATIONS

Discovering Web Access Patterns and Trends by Applying OLAP and Data Mining Technology on Web Logs, Zaiane, Xin and Han, Proceedings of the IEEE Forum on Research and Technology Advances in Digital Libraries (IEEE ADL '98). pp. 19–29 (1998).

Tree Visualization with Tree–Maps: 2–d Space–Filling Approach, Shneiderman, Ben, ACM Transactions on Graphics vol. 11, No. 1, Jan. 1992, pp. 92–99.

"Getting Started" Manual for Netcarta WebMapper 1.0 for Windows NT/95, dated 1996.

User's Guide for NetCarta WebMapper 1.0 for Windows NT/95, dated 1996.

Product packaging (front and back) for NetCarta WebMapper 1.0, dated 1996.

(List continued on next page.)

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[57] ABSTRACT

A visual Web site analysis program, implemented as a collection of software components, provides a variety of features for facilitating the analysis, management and loadtesting of Web sites. A mapping component scans a Web site over a network connection and builds a site map which graphically depicts the URLs and links of the site. Site maps are generated using a unique layout and display methodology which allows the user to visualize the overall architecture of the Web site. Various map navigation and URL filtering features are provided to facilitate the task of identifying and repairing common Web site problems, such as links to missing URLs. Advnamic page scan feature enables the user to include dynamically-generated Web pages within the site map by capturing the output of a standard Web browser when a form is submitted by the user, and then automatically resubmitting this output during subsequent mappings of the site. An Action Tracker module detects user activity and behavioral data (link activity levels, common site entry and exit points, etc.) from server log files and then superimposes such data onto the site map. A Load Wizard module uses this activity data to generate testing scenarios for load testing the Web site.

36 Claims, 32 Drawing Sheets

Microfiche Appendix Included (1 Microfiche, 51 Pages)

